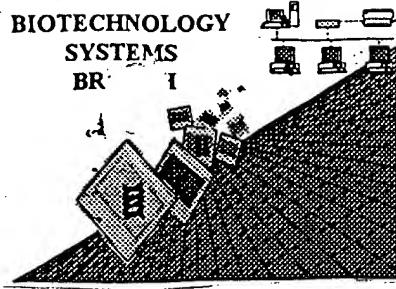


# RAW SEQUENCE LISTING

## ERROR REPORT



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 091937862

Source: PCT09

Date Processed by STIC: 10/30/01

**THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.**

**PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:**

- 1) **INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
- 2) **TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**

**FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.**

**FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.**

**PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)**

**PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)**

**TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:**

### **Checker Version 3.0**

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO).

Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

**Checker Version 3.0 can be down loaded from the USPTO website at the following address:**

**<http://www.uspto.gov/web/offices/pac/checker>**

## Raw Sequence Listing Error Summary

ERROR DETECTED    SUGGESTED CORRECTION    SERIAL NUMBER: 091937,862

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPIA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1  Wrapped Nucleic  
   Wrapped Aminos The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2  Invalid Line Length The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3  Misaligned Amino  
  Numbering The numbering under each 5<sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4  Non-ASCII The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5  Variable Length Sequence(s) \_\_\_\_\_ contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6  PatentIn 2.0  
  "bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) \_\_\_\_\_. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7  Skipped Sequences  
  (OLD RULES) Sequence(s) \_\_\_\_\_ missing. If intentional, please insert the following lines for each skipped sequence:  
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
  (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)  
  (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
This sequence is intentionally skipped  
  
Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8  Skipped Sequences  
  (NEW RULES) Sequence(s) \_\_\_\_\_ missing. If intentional, please insert the following lines for each skipped sequence.  
<210> sequence id number  
<400> sequence id number  
000
- 9  Use of n's or Xaa's  
  (NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.  
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.  
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 10  Invalid <213>  
  Response Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
- 11  Use of <220> Sequence(s) \_\_\_\_\_ missing the <220> "Feature" and associated numeric identifiers and responses.  
Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.  
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12  PatentIn 2.0  
  "bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

PCT09

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/937,862

DATE: 10/30/2001  
TIME: 13:19:11

Input Set : A:\W112887.txt  
Output Set: N:\CRF3\10302001\I937862.raw

Does Not Comply  
Corrected Diskette Needed

```

W--> 4 <110> APPLICANT:  

W--> 6 Oberste, M. Steven  

W--> 7 Maher, Kaija  

W--> 8 Kilpatrick, David R.  

W--> 9 Pallansch, Mark A.  

12 <120> TITLE OF INVENTION: TYPING OF HUMAN NON-POLIO ENTEROVIRUSES  

14 <130> FILE REFERENCE: 14114.0353U2  

C--> 16 <140> CURRENT APPLICATION NUMBER: US/09/937,862  

C--> 16 <141> CURRENT FILING DATE: 2001-09-28  

16 <150> PRIOR APPLICATION NUMBER: PCT/US00/07828  

W--> 17 <151> PRIOR FILING DATE: 2000-3-24  

19 <150> PRIOR APPLICATION NUMBER: 60/127,464  

W--> 20 <151> PRIOR FILING DATE: 1999-3-31  

22 <160> NUMBER OF SEQ ID NOS: 86  

24 <170> SOFTWARE: FastSEQ for Windows Version 3.0  

26 <210> SEQ ID NO: 1  

27 <211> LENGTH: 20  

28 <212> TYPE: DNA  

29 <213> ORGANISM: Artificial Sequence  

W--> 31 <220> FEATURE:  

W--> 31 <223> OTHER INFORMATION: - must explain, See error summary sheet, Item 11  

31 <400> SEQUENCE: 1  

32 gcrtgcaatg ayttctcwgt  

34 <210> SEQ ID NO: 2  

35 <211> LENGTH: 18  

36 <212> TYPE: DNA  

37 <213> ORGANISM: Artificial Sequence  

W--> 39 <220> FEATURE:  

W--> 39 <223> OTHER INFORMATION: - Same error  

39 <400> SEQUENCE: 2  

W--> 40 ngncccdgat tgntgsc  

42 <210> SEQ ID NO: 3  

43 <211> LENGTH: 20  

44 <212> TYPE: DNA  

45 <213> ORGANISM: Artificial Sequence  

47 <220> FEATURE:  

48 <221> NAME/KEY: modified_base  

49 <222> LOCATION: (3)...(0) ? unacceptable explanation → Item 11  

50 <223> OTHER INFORMATION: I  

52 <221> NAME/KEY: modified_base  

53 <222> LOCATION: (6)...(0)  

54 <223> OTHER INFORMATION: I  

56 <221> NAME/KEY: modified_base  

57 <222> LOCATION: (12)...(0)  

58 <223> OTHER INFORMATION: I  

60 <221> NAME/KEY: modified_base  

61 <222> LOCATION: (15)...(0)

```

The type of errors shown exist throughout  
the Sequence Listing. Please check subsequent  
sequences for similar errors.

(1)

↑  
- must explain, See error summary sheet, Item 11

Source

20

missin  
<221> must provide appropriate identifier  
<222> must give location of n + identify n

(2)

→ see error summary sheet item  
#9

18

Item 11

? unacceptable explanation → Item 11

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/937,862

DATE: 10/30/2001  
TIME: 13:19:11

Input Set : A:\W112887.txt  
Output Set: N:\CRF3\10302001\I937862.raw

```

62 <223> OTHER INFORMATION: I
64 <400> SEQUENCE: 3
W--> 65 gcnccnayt gntgnccraa
67 <210> SEQ_ID NO: 4
68 <211> LENGTH: 20
69 <212> TYPE: DNA
70 <213> ORGANISM: Artificial Sequence
72 <220> FEATURE:
73 <221> NAME/KEY: modified_base
74 <222> LOCATION: (9)...(0)
75 <223> OTHER INFORMATION: I
77 <221> NAME/KEY: modified_base
78 <222> LOCATION: (12)...(0)
79 <223> OTHER INFORMATION: I
81 <221> NAME/KEY: modified_base
82 <222> LOCATION: (15)...(0)
83 <223> OTHER INFORMATION: I
85 <221> NAME/KEY: modified_base
86 <222> LOCATION: (18)...(0)
87 <223> OTHER INFORMATION: I
89 <400> SEQUENCE: 4
W--> 90 atgtaygtnc cnccnnggg
92 <210> SEQ_ID NO: 5
93 <211> LENGTH: 20
94 <212> TYPE: DNA
95 <213> ORGANISM: Artificial Sequence
97 <220> FEATURE:
98 <221> NAME/KEY: modified_base
99 <222> LOCATION: (3)...(0)
100 <223> OTHER INFORMATION: I
102 <221> NAME/KEY: modified_base
103 <222> LOCATION: (9)...(0)
104 <223> OTHER INFORMATION: I
106 <221> NAME/KEY: modified_base
107 <222> LOCATION: (15)...(0)
108 <223> OTHER INFORMATION: I
W--> 109 <400> SEQUENCE: 5
W--> 110 ggngcrttnc cytcnngtcca
112 <210> SEQ_ID NO: 6
113 <211> LENGTH: 20
114 <212> TYPE: DNA
115 <213> ORGANISM: Artificial Sequence
117 <220> FEATURE:
118 <221> NAME/KEY: modified_base
119 <222> LOCATION: (6)...(0)
120 <223> OTHER INFORMATION: I
122 <221> NAME/KEY: modified_base
123 <222> LOCATION: (8)...(0)
124 <223> OTHER INFORMATION: I

```

Some errors as ① + ②  
Repeated throughout

20

20

20

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/937,862

DATE: 10/30/2001  
TIME: 13:19:11

Input Set : A:\W112887.txt  
Output Set: N:\CRF3\10302001\I937862.raw

```

126 <221> NAME/KEY: modified_base
127 <222> LOCATION: (9)...(0)
128 <223> OTHER INFORMATION: I
130 <221> NAME/KEY: modified_base
131 <222> LOCATION: (18)...(0)
132 <223> OTHER INFORMATION: I
134 <400> SEQUENCE: 6
W--> 135 acrtgncnng tytgcatngt 20
137 <210> SEQ ID NO: 7
138 <211> LENGTH: 18
139 <212> TYPE: DNA
140 <213> ORGANISM: Artificial Sequence
142 <220> FEATURE:
143 <221> NAME/KEY: modified_base
144 <222> LOCATION: (3)...(0)
145 <223> OTHER INFORMATION: I
147 <221> NAME/KEY: modified_base
148 <222> LOCATION: (15)...(0)
149 <223> OTHER INFORMATION: I
151 <400> SEQUENCE: 7
W--> 152 awnttytayg ayggntgg 18
154 <210> SEQ ID NO: 8
155 <211> LENGTH: 20
156 <212> TYPE: DNA
157 <213> ORGANISM: Artificial Sequence
159 <220> FEATURE:
160 <221> NAME/KEY: modified_base
161 <222> LOCATION: (3)...(0)
162 <223> OTHER INFORMATION: I
164 <221> NAME/KEY: modified_base
165 <222> LOCATION: (5)...(0)
166 <223> OTHER INFORMATION: I
168 <221> NAME/KEY: modified_base
169 <222> LOCATION: (6)...(0)
170 <223> OTHER INFORMATION: I
172 <221> NAME/KEY: modified_base
173 <222> LOCATION: (9)...(0)
174 <223> OTHER INFORMATION: I
176 <400> SEQUENCE: 8
W--> 177 tananngtnc ccatrrtrtt 20
179 <210> SEQ ID NO: 9
180 <211> LENGTH: 20
181 <212> TYPE: DNA
182 <213> ORGANISM: Artificial Sequence
184 <220> FEATURE:
185 <221> NAME/KEY: modified_base
186 <222> LOCATION: (9)...(0)
187 <223> OTHER INFORMATION: I
189 <221> NAME/KEY: modified_base

```

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/937,862

DATE: 10/30/2001  
TIME: 13:19:11

Input Set : A:\W112887.txt  
Output Set: N:\CRF3\10302001\I937862.raw

```

190 <222> LOCATION: (15)...(0)
191 <223> OTHER INFORMATION: I
193 <221> NAME/KEY: modified_base
194 <222> LOCATION: (18)...(0)
195 <223> OTHER INFORMATION: I
197 <400> SEQUENCE: 9
W--> 198 atgtayrtnccnmcnggngc
200 <210> SEQ ID NO: 10
201 <211> LENGTH: 20
202 <212> TYPE: DNA
203 <213> ORGANISM: Artificial Sequence
205 <220> FEATURE:
206 <221> NAME/KEY: modified_base
207 <222> LOCATION: (3)...(0)
208 <223> OTHER INFORMATION: I
210 <221> NAME/KEY: modified_base
211 <222> LOCATION: (6)...(0)
212 <223> OTHER INFORMATION: I
214 <221> NAME/KEY: modified_base
215 <222> LOCATION: (12)...(0)
216 <223> OTHER INFORMATION: I
218 <221> NAME/KEY: modified_base
219 <222> LOCATION: (15)...(0)
220 <223> OTHER INFORMATION: I
222 <400> SEQUENCE: 10
W--> 223 ggngggnggrtcngtnakytt
225 <210> SEQ ID NO: 11
226 <211> LENGTH: 20
227 <212> TYPE: DNA
228 <213> ORGANISM: Artificial Sequence
230 <220> FEATURE:
231 <221> NAME/KEY: modified_base
232 <222> LOCATION: (3)...(0)
233 <223> OTHER INFORMATION: I
235 <221> NAME/KEY: modified_base
236 <222> LOCATION: (12)...(0)
237 <223> OTHER INFORMATION: I
239 <221> NAME/KEY: modified_base
240 <222> LOCATION: (15)...(0)
241 <223> OTHER INFORMATION: I
243 <400> SEQUENCE: 11
W--> 244 gangaraayctnatngarac
246 <210> SEQ ID NO: 12
247 <211> LENGTH: 19
248 <212> TYPE: DNA
249 <213> ORGANISM: Artificial Sequence
251 <220> FEATURE:
252 <221> NAME/KEY: modified_base
253 <222> LOCATION: (6)...(0)

```

20

20

20

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/937,862

DATE: 10/30/2001  
TIME: 13:19:11

Input Set : A:\W112887.txt  
Output Set: N:\CRF3\10302001\I937862.raw

254 <223> OTHER INFORMATION: I  
 256 <221> NAME/KEY: modified\_base  
 257 <222> LOCATION: (12)...(0)  
 258 <223> OTHER INFORMATION: I  
 260 <400> SEQUENCE: 12  
 W--> 261 cccatnakrt cnatrtccc 19  
 263 <210> SEQ ID NO: 13  
 264 <211> LENGTH: 20  
 265 <212> TYPE: DNA  
 266 <213> ORGANISM: Artificial Sequence  
 268 <220> FEATURE:  
 269 <221> NAME/KEY: modified\_base  
 270 <222> LOCATION: (9)...(0)  
 271 <223> OTHER INFORMATION: I  
 273 <221> NAME/KEY: modified\_base  
 274 <222> LOCATION: (11)...(0)  
 275 <223> OTHER INFORMATION: I  
 277 <221> NAME/KEY: modified\_base  
 278 <222> LOCATION: (12)...(0)  
 279 <223> OTHER INFORMATION: I  
 281 <400> SEQUENCE: 13  
 W--> 282 gtretyacna nnagrtcyct 20  
 284 <210> SEQ ID NO: 14  
 285 <211> LENGTH: 19  
 286 <212> TYPE: DNA  
 287 <213> ORGANISM: Artificial Sequence  
 W--> 289 <220> FEATURE:  
 W--> 289 <223> OTHER INFORMATION:  
 289 <400> SEQUENCE: 14  
 290 tsaarytgca gacac 19  
 292 <210> SEQ ID NO: 15  
 293 <211> LENGTH: 18  
 294 <212> TYPE: DNA  
 295 <213> ORGANISM: Artificial Sequence  
 W--> 297 <220> FEATURE:  
 W--> 297 <223> OTHER INFORMATION:  
 297 <400> SEQUENCE: 15  
 298 stgyccagat ttcatgt 18  
 300 <210> SEQ ID NO: 16  
 301 <211> LENGTH: 20  
 302 <212> TYPE: DNA  
 303 <213> ORGANISM: Artificial Sequence  
 W--> 305 <220> FEATURE:  
 W--> 305 <223> OTHER INFORMATION:  
 305 <400> SEQUENCE: 16  
 W--> 306 ggnacncayr tnathggga 20  
 308 <210> SEQ ID NO: 17  
 309 <211> LENGTH: 20  
 310 <212> TYPE: DNA

VERIFICATION SUMMARY  
PATENT APPLICATION: US/09/937,862

DATE: 10/30/2001  
TIME: 13:19:12

Input Set : A:\W112887.txt  
Output Set: N:\CRF3\10302001\I937862.raw

L:4 M:201 W: Mandatory field data missing, APPLICANT NAME  
L:16 M:270 C: Current Application Number differs, Replaced Current Application No  
L:16 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:17 M:256 W: Invalid Numeric Header Field, Wrong Prior FILING DATE:YYYY-MM-DD  
L:20 M:256 W: Invalid Numeric Header Field, Wrong Prior FILING DATE:YYYY-MM-DD  
L:31 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:31 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:39 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:39 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:40 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:2  
L:40 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:2  
L:40 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2  
L:65 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
L:90 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
L:109 M:283 W: Missing Blank Line separator, <400> field identifier  
L:110 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5  
L:135 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6  
L:152 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7  
L:177 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8  
L:198 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9  
L:223 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10  
L:244 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11  
L:261 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12  
L:282 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13  
L:289 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:289 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:297 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:297 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:305 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:305 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:306 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:16  
L:306 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:16  
L:306 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16  
L:327 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17  
L:352 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18  
L:377 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19  
L:402 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20  
L:423 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21  
L:448 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22  
L:2022 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:81  
L:2022 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:81  
L:2022 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:81  
L:2034 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:82  
L:2034 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:82  
L:2034 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:82  
L:2046 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:83  
L:2046 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:83  
L:2046 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:83

**VERIFICATION SUMMARY**  
PATENT APPLICATION: US/09/937,862

DATE: 10/30/2001  
TIME: 13:19:12

Input Set : A:\W112887.txt  
Output Set: N:\CRF3\10302001\I937862.raw

L:2058 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:84  
L:2058 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:84  
L:2058 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:84  
L:2083 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:86  
L:2083 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:86  
L:2083 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:86